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| 09/927,569 | 08/10/2001 | Neal A. Schneider | ETEL 0001 | 7270 |
| 7590 02/22/2005 | | | EXAMINER FERRIS, DERRICK W | |
| Bradley T. Sako WALKER & SAKO, LLP Suite 235 300 South First Street San Jose, CA 95113 | | | ART UNIT 2663 | |
| DATE MAILED: 02/22/2005 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/927,569

Applicant(s)SCHNEIDER ET AL. UX**Examiner**

Derrick W. Ferris

Art Unit

2663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 18-20 is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☒ Claim(s) 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/12/2002.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1-6, 11 and 12** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,389,479 B1 to *Boucher et al.* ("*Boucher*") in view of U.S. Patent No. "Data performance in an Integrated Packet Voice/Data System Using Voice Congestion Control" to *Yin et al.* ("*Yin*").

As such to **claim 1**, *Boucher* discloses a receiver subsystem as host 20, see e.g., figure 1. *Boucher* discloses memory 60 as part of a receive FIFO. In particular, the receive FIFO stores the headers and data memory 60, see e.g., column 7, lines 43-59. As such, there is a plurality of entries, one for each packet. In addition, the control data indicates packet layer information that corresponds to the header information of memory 60. The receive queue is also part of memory 60. In particular, the receive queue also has a plurality of entries, one for each flow. As such, the receive queue stores queue information for each packet stored in the receive FIFO, the queue information including a packet standard value that indicates when the packet corresponding to the entry passes predetermined header processing filters. In particular, the status word or words act as a receive queue which determines whether a packet takes a fast flow, see e.g., column 6, lines 55-67.

Boucher may be silent or deficient to the further limitation of a FIFO queue. In particular, *Boucher* teaches a general memory 60. *Boucher* may also be silent or deficient to the further limitation of storing a voice packet. In particular, *Boucher* teaches storing any type of a packet.

Yin teaches the further recited limitation above at e.g., in the abstract

The proposed modification of the above-applied reference(s) necessary to arrive at the claimed subject matter would be to modify *Boucher* by disclosing that it is well known in the art to use FIFO queuing for a queue and to service voice packets as any type of packet.

As such, examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to include the above limitation. In particular, the motivation for modifying the reference or to combine the reference teachings would be to service packets in a defined ordering and to transmit voice using data packets. In particular, *Yin* cures the above-cited deficiency by providing a motivation found at e.g., the abstract. Thus the references either in singular or in combination teach the above claim limitation(s).

As to **claim 2**, see the protocol processing stack 44 which supports layer 3 and layer 4.

As to **claim 3**, *Boucher* supports packet positioning, see e.g., column 6, lines 33-54.

As to **claims 4-5**, context information is compared including addresses such as a layer 3 address, see e.g., column 5, lines 35-54 of *Boucher*.

As to **claim 6**, see e.g., figures 4a-d where data is forwarded to storage 35. .

As to **claim 11**, the CPD contains a DMA which is transferred in part of the control information, see e.g., column 5, lines 53-65.

As to **claim 12**, the processor 5 (see e.g., figure 4a-4d) performs the function of an arbitrator and is also coupled to memory 60 or the receive queue.

3. **Claims 7-10, and 13-15** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,389,479 B1 to *Boucher et al.* ("*Boucher*") in view of U.S. Patent No. "Data performance in an Integrated Packet Voice/Data System Using Voice Congestion Control" to *Yin et al.* ("*Yin*") in further view of U.S. Patent No. 5,303,344 to *Yokoyama et al.* ("*Yokoyama*").

As to **claims 7-10**, *Boucher* teaches that independent layer processors are possible which store the corresponding layered information including the layered header, see e.g., column 6, lines 16-32. However, *Boucher* may be silent or deficient in specifically mentioning pipeline layer processing. Examiner notes that pipeline layer processing is well known in the art. In particular, *Yokoyama* teaches the above limitation at issue with respect to figure 8. Thus the examiner proposes to modify *Boucher* and *Yin* to clarify that pipeline layer processing is well known in the art prior to applicant's invention. As such, examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to further include the above limitation. In particular, one skilled in the art would have been motivated to include the above limitation for the purpose of speeding up header conversion. As such, *Yokoyama* teaches the above motivation e.g., at column 6, line 47 – column 7, lines 6.

As to **claim 13**, see similar combined rejections to claims 1 and 7.

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As to **claim 14**, as mentioned in the rejection for claim 1, a layer register is part of the memory 60 which contains the header information.

As to **claim 15**, see e.g., column 5, lines 35-50 where TCP/IP is supported.

4. **Claim 16** is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,389,479 B1 to *Boucher et al.* ("*Boucher*") in view of U.S. Patent No. "Data performance in an Integrated Packet Voice/Data System Using Voice Congestion Control" to *Yin et al.* ("*Yin*") in further view of "Data and Computer Communications" to *Stallings et al.* ("*Stallings*").

As to **claim 16**, *Boucher* teaches processing transport protocols but is silent or deficient in mentioning UDP. Examiner notes that UDP is well known in the art. In particular, *Stallings* teaches the above limitation at issue with respect to figure 17.16 on page 619. Thus the examiner proposes to modify *Boucher* and *Yin* to clarify that UDP is a well-known transport protocol. As such, examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to further include the above limitation. In particular, one skilled in the art would have been motivated to include the above limitation for the purpose of using a transport protocol. As such, *Stallings* teaches the above motivation e.g., at Section 17.4 on page 619.

Allowable Subject Matter

5. **Claims 18-20** are allowable.

6. **Claim 17** is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Derrick W. Ferris whose telephone number is (571) 272-3123.


The examiner can normally be reached on M-F 9 A.M. - 4:30 P.M. E.S.T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571)272-3139. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


DWF

Derrick W. Ferris
Examiner
Art Unit 2663


Derrick W. Ferris
2/15/2005